

REMARKS

Favorable reconsideration is respectfully requested.

The claims are 1 to 18.

Claims 1, 15 and 18, i.e. the independent claims, are amended to recite that the upper limit of the resist film thickness is 570 nm. This upper limit is supported by original claim 17 and the Examples.

This amendment is presented to stress the significance of the film thickness.

New claim 18 is based on the disclosure of [0033] and the Examples of the present specification.

In this regard, since the Examples of the specification have a surfactant concentration of 10 ppm and since the absorbent will reduce the concentration of the surfactant to below 10 ppm, there is clear support for claim 18 and for the fact that the photoresist layer has a surface active agent concentration of less than 10 ppm.

Claims 1 to 17 have been rejected under 35 U.S.C. 112 as failing to comply with the written description requirement with regard to the recitation of "a surface active agent in a concentration lower than 10 ppm by weight based on the amount of resinous compound." The rejection states that there is no adequate support for the present amount "lower than 10 ppm" in the original disclosure.

In reply, such amount is clearly supported by the examples employing a concentration of 10 ppm and a statement in paragraph [0033] that the amount of surface active agent present in an amount as small as possible by removing the surface active agent is completely as possible prior to application under composition onto the substrate surface by using an adsorbent.

This statement provides adequate guidance to those skilled in the art to employ less than 10 ppm surfactant, for all claims but particularly with respect to claim 18.

The claims have been rejected as being unpatentable over Fujie et al. (U.S. 6,303,264) alone or in combination with other references.

These rejections are respectfully traversed.

The following comments are made only with respect to the Fujie '264 reference since all of the rejections rely on the teaching of this reference alone or in combination with other references.

The essential features of claim 1 include a specified range of the film thickness and a specified range of the surfactant concentration. Essentially, the present invention is a selection invention relative to the recited ranges of certain numerical values. The

desired and unobvious advantages in decreased "defects" and "coating unevenness" can be obtained only by employing values within these ranges.

Fujie '264 at column 21, line 37 discloses a film thickness range of 0.5 to 2 μm . This disclosure, however, is a mere indication of the conventionally operable range and has no further significance. In fact, the thickness disclosed in the Examples of this reference is limited to 1 μm , further remote from the thickness limitation in claim 1 after the above amendment.

In connection with the range of the surfactant concentration, similarly, the lower limit of 10 ppm differs from the value of 10000 ppm (0.05/4.5%) in Example 1 of the reference with a more than reasonable i.e. unobvious difference. Accordingly, the reference is in no way suggestive of the upper limit 10 ppm even if the art-skilled were desirous of employing a surfactant as taught by Fujie '264.

In sum, no one aware of the disclosure in this reference would be motivated to follow the presently claimed limitations relative to the resist film thickness and the surfactant concentration even if he were desirous of accomplishing the advantages of decreasing defects and coating unevenness. There is absolutely no motivation to employ the value of 9.9 ppm alleged by the rejection, e.g. at page 3 of the Official Action.

For the foregoing reasons, it is apparent that the rejections relying on the above-discussed teachings of Fujie are untenable and should be withdrawn.


No further issues remaining, allowance of this application is respectfully requested.

If the Examiner has any comments or proposals for expediting prosecution, please contact undersigned at the telephone number below.

THE COMMISSIONER IS AUTHORIZED
TO CHARGE ANY DEFICIENCY IN THE
FEES FOR THIS PAPER TO DEPOSIT
ACCOUNT NO. 23-0975

Respectfully submitted,

Satoshi MAEMORI et al.

By: 
Matthew M. Jacob
Registration No. 25,154
Attorney for Applicants

MJ/kes
Washington, D.C. 20006-1021
Telephone (202) 721-8200
Facsimile (202) 721-8250
June 20, 2005